State:	District of Columbia	*First Filing Company:*	State Auto Property and Casualty Insurance Company, ...
TOI/Sub-TOI:	17.2 Other Liability-Claims Made Only/17.2024 Internet Liability		
Product Name:	Cyber - RR		
Project Name/Number:	Cyber Liability/DC_CGL_RR_20161215_SAC_CYB		

Filing at a Glance

Companies:	State Auto Property and Casualty Insurance Company
	State Automobile Mutual Insurance Company
Product Name:	Cyber - RR
State:	District of Columbia
TOI:	17.2 Other Liability-Claims Made Only
Sub-TOI:	17.2024 Internet Liability
Filing Type:	Rate/Rule
Date Submitted:	11/11/2016
SERFF Tr Num:	SAMM-130760900
SERFF Status:	Submitted to State
State Tr Num:	
State Status:	
Co Tr Num:	DC_CGL_RR_20161215_SAC_CYB
Effective Date Requested (New):	12/15/2016
Effective Date Requested (Renewal):	12/15/2016
Author(s):	Doug Griffith, Barb Wickham
Reviewer(s):	
Disposition Date:	
Disposition Status:	
Effective Date (New):	
Effective Date (Renewal):	

State:	District of Columbia	*First Filing Company:* State Auto Property and Casualty Insurance Company, ...

TOI/Sub-TOI: 17.2 Other Liability-Claims Made Only/17.2024 Internet Liability
Product Name: Cyber - RR
Project Name/Number: Cyber Liability/DC_CGL_RR_20161215_SAC_CYB

General Information

Project Name: Cyber Liability

Project Number: DC_CGL_RR_20161215_SAC_CYB

Reference Organization:

Reference Title:

Filing Status Changed: 11/11/2016

State Status Changed:

Created By: Barb Wickham

Corresponding Filing Tracking Number:

Status of Filing in Domicile:

Domicile Status Comments:

Reference Number:

Advisory Org. Circular:

Deemer Date:

Submitted By: Barb Wickham

Filing Description:

State Auto is submitting this rates and rules filing to introduce a new product, CyberSecure Coverage, that responds to the threat of unauthorized intrusion into or interference with an insured's computer systems. This product includes coverages that address damage to data and systems from a computer attack and the liability that may arise from insufficient systems security. A corresponding form filing has been submitted separately, as required.

Attached are the following:

• Manual Pages
• Supporting Documentation

As this is a new product for State Auto, there is no effect on any insureds and there is no rate impact resulting from this filing.

Company and Contact

Filing Contact Information

Doug Griffith, State Filings Regulatory Mgr   Doug.Griffith@StateAuto.com

518 E. Broad Street   614-917-5492 [Phone]

Columbus, OH 43215   614-887-1615 [FAX]

Filing Company Information

State Auto Property and Casualty Insurance Company	CoCode: 25127	State of Domicile: Iowa
1300 Woodland Avenue	Group Code: 175	Company Type: Property and Casualty
P. O. Box 66150	Group Name: State Auto Group	State ID Number:
West Des Moines, IA 50265-0150	FEIN Number: 57-6010814	
(614) 464-5000 ext. [Phone]		

State Automobile Mutual Insurance Company	CoCode: 25135	State of Domicile: Ohio
518 East Broad Street	Group Code: 175	Company Type: Property and Casualty
P. O. Box 182822	Group Name: State Auto Group	State ID Number:
Columbus, OH 43215	FEIN Number: 31-4316080	
(614) 464-5000 ext. [Phone]		

State:	District of Columbia	**First Filing Company:**	State Auto Property and Casualty Insurance Company, ...

TOI/Sub-TOI: 17.2 Other Liability-Claims Made Only/17.2024 Internet Liability
Product Name: Cyber - RR
Project Name/Number: Cyber Liability/DC_CGL_RR_20161215_SAC_CYB

Filing Fees

Fee Required?   No

Retaliatory?   No

Fee Explanation:

State:	*District of Columbia*		*First Filing Company:*	*State Auto Property and Casualty Insurance Company, ...*
TOI/Sub-TOI:	*17.2 Other Liability-Claims Made Only/17.2024 Internet Liability*			
Product Name:	*Cyber - RR*			
Project Name/Number:	*Cyber Liability/DC_CGL_RR_20161215_SAC_CYB*			

Rate Information

Rate data applies to filing.

Filing Method: File and Use

Rate Change Type: Neutral

Overall Percentage of Last Rate Revision: 0.000%

Effective Date of Last Rate Revision:

Filing Method of Last Filing:

Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
State Auto Property and Casualty Insurance Company	0.000%	0.000%	$0	0	$0	0.000%	0.000%
State Automobile Mutual Insurance Company	0.000%	0.000%	$0	0	$0	0.000%	0.000%

SERFF Tracking #:	SAMM-130760900	**State Tracking #:**	**Company Tracking #:** DC_CGL_RR_20161215_SAC_CYB

State: District of Columbia **First Filing Company:** State Auto Property and Casualty Insurance Company, ...
TOI/Sub-TOI: 17.2 Other Liability-Claims Made Only/17.2024 Internet Liability
Product Name: Cyber - RR
Project Name/Number: Cyber Liability/DC_CGL_RR_20161215_SAC_CYB

Rate/Rule Schedule

Item No.	Schedule Item Status	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Attachments
1		Cyber_Manual	Entire Rule	New		DC_Cyber_Manual.pdf

Rule N. Cybersecure Coverage

1. Description of Coverage

The CyberSecure coverage is comprised of two coverage components – first party Computer Attack coverage and third party Cyber Liability coverage.

a. Computer Attack Coverage can be offered on a Full or Limited basis:

1) Full Coverage

a) Data Restoration Costs - Coverage for the cost of a professional firm hired by the insured to replace lost or corrupted data from electronic sources.

b) Data Re-creation Costs - Coverage for the cost of a professional firm hired by the insured to research, recreate and replace lost or corrupted data from *non*-electronic sources. Sublimit varies based on Computer Attack limit selected.

c) System Restoration Costs - Coverage for the cost of a professional firm hired by the insured to restore its computer system to its pre-attack level of functionality by replacing or reinstalling software, removing malicious code and correcting the configuration of the insured's computer system.

d) Loss of Business - Coverage for business income lost by the insured and extra expenses incurred by the insured during the period of time when system and data recovery activities are taking place. Sublimit varies based on Computer Attack limit selected.

e) Public Relations Services - Coverage for assistance from a professional public relations firm in communicating with outside parties concerning the Computer Attack and the insured's response. Subject to a sublimit of $5,000.

2) Limited Coverage

a) Data Restoration Costs

b) System Restoration Costs

b. Cyber Extortion Coverage is available as an additional option for Full or Limited coverage. Coverage is provided for the cost of a professional firm hired by the insured to investigate and negotiate a cyber extortion threat – a credible threat or series of threats to launch a potential denial of service attack against an insured. Cyber Extortion Coverage is subject to a sublimit of $10,000 or $25,000, each being available for use with all Computer Attack Limits.

Discovery of the attack must occur during the policy period. Coverage does not apply to breaches that occur prior to the first inception of the coverage.

c. Cyber Liability Coverage can be offered on a Full or Limited basis and provides coverage for:

1) Full Coverage

a) The breach of third party business information

b) The unintended propagation or forwarding of malware

c) The unintended abetting of a denial of service attack

2) Limited Coverage

a) The unintended propagation or forwarding of malware

b) The unintended abetting of a denial of service attack

There need not be a covered loss under the first party Computer Attack coverage in order for there to be a loss under the third party Cyber Liability coverage.

The Cyber Liability limit is separate from that afforded under the Computer Attack Coverage. Limits cannot be combined or stacked. Only the limit in force during the policy period when notice of the suit was first received by the insured will apply.

Receipt of notice of the suit must occur during the policy period, and the suit must arise from an event that occurs after the first inception of the coverage.

The coverage will be defense within the limits.

    d. **Electronic Media Liability Coverage** is available as an additional option for Full or Limited coverage. Coverage is provided for defense and settlement costs in the event that a third party claimant sues the insured alleging that the insured's electronic communications resulted in defamation, violation of a person's right of privacy, interference with a person's right of publicity or infringement of copyright or trademark.

    e. For details of CyberSecure Coverage refer to the following**:**

- Coverage Form: **CY 00 01**
- Coverage Declarations: **CY 50 00**

2. Eligibility

Insured entities are eligible unless they are in the generally excluded classes of: Adult Business, Gambling or Gaming, Financial Institutions, Municipalities and Schools, Colleges and Universities.

3. Coverage Limits

Refer to the Rate Table for available limits.

4. Deductible

Refer to the Rate Table for available deductibles.

5. Supplemental Extended Reporting Period

A Supplemental Extended Reporting Period of one year immediately following the effective date of termination of coverage may be purchased for an additional premium of 100% of the full annual premium applicable to this coverage. This applies only to the Cyber Liability Coverage. Use **Supplemental Extended Reporting Period Endorsement for CyberSecure Coverage– CY 02 00**

COMMERCIAL LINES MANUAL
DIVISION SIX - GENERAL LIABILITY
EXCEPTION PAGE

6. **Rate Table**

   The premiums below are annual gross premiums per Policy for the chosen coverage, limit and deductible
   option. Premiums may be pro-rated for short or odd term Policies.

   Except for the Risk Modification factors below, these premiums are not subject to further modification by the
   application of any other factors (e.g. company deviations, or expense modifications).

Computer Attack Limit/ Cyber Liability Limit	Computer Attack Deductible	Cyber Liability Deductible	3rd Party Business Information	Data Re-creation Limit	Loss of Business Limit	Public Relations Services Limit	Cyber Extortion	Electronic Media Liability	Premium
$50,000/$50,000	$1,000	$1,000	n/a	n/a	n/a	n/a	$10,000	Included	$97
$100,000/$100,000	$1,000	$1,000	Included	$5,000	$10,000	$5,000	$10,000	Included	$321
$250,000/$250,000	$10,000	$10,000	Included	$12,500	$25,000	$5,000	$25,000	Included	$680
$500,000/$500,000	$10,000	$10,000	Included	$25,000	$50,000	$5,000	$25,000	Included	$842
$1,000,000/$1,000,000	$10,000	$10,000	Included	$50,000	$100,000	$5,000	$25,000	Included	$975

Cyber Extortion Limit Option:
The base Cyber Extortion Limit of $10,000 may be increased to $25,000 for a $62 additional premium.

7. **Risk Modification**

   For increased limits of $250,000, $500,000 and $1,000,000 use the following criteria to determine the Risk Modification Factor to be used for rating. Assign debits and credits based on the following categories. Add the debits and credits, convert to a decimal form and add 1.00 to create a factor to modify the premium. Multiply the premium above by this factor. The total debit or credit cannot exceed 25%.

Risk Characteristics Modification	Range of Modifications	
	Credit	Debit
Quality of Management	10%	10%
Cyber Controls	10%	10%
Network Dependence	10%	10%
Loss or Claim History	10%	10%
Risk Management	10%	10%
Industry Risk	10%	10%

8. **Minimum Premium**

   This coverage is not subject to a minimum premium.

9. **In-term Coverage Request**

   This endorsement may be added at the anniversary of the policy or may be added in-term. CYBERSECURE Coverage deductible, limit and coverage changes may only be made upon the anniversary of the addition of the CYBERSECURE Coverage Form.

SERFF Tracking #:	SAMM-130760900	State Tracking #:		Company Tracking #:	DC_CGL_RR_20161215_SAC_CYB

State:	*District of Columbia*	*First Filing Company:*	*State Auto Property and Casualty Insurance Company, ...*
TOI/Sub-TOI:	*17.2 Other Liability-Claims Made Only/17.2024 Internet Liability*		
Product Name:	*Cyber - RR*		
Project Name/Number:	*Cyber Liability/DC_CGL_RR_20161215_SAC_CYB*		

Supporting Document Schedules

Bypassed - Item:	Consulting Authorization
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Bypassed - Item:	Actuarial Certification (P&C)
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Bypassed - Item:	District of Columbia and Countrywide Experience for the Last 5 Years (P&C)
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Bypassed - Item:	District of Columbia and Countrywide Loss Ratio Analysis (P&C)
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Satisfied - Item:	Filing Memorandum
Comments:	
Attachment(s):	Multistate_CYBER_EXP_Memo_1.0.pdf
Item Status:	
Status Date:	

We have developed a new product solution, CyberSecure Coverage, that responds to the threat of unauthorized intrusion into or interference with an insured's computer systems. This product includes coverages that address damage to data and systems from a computer attack and the liability that may arise from insufficient systems security.

The rates for this product have been developed in the absence of credible data specific to the applicable coverages. The Hartford Steam Boiler Inspection and Insurance Company (HSB) developed these charges primarily from publicly available data about events that would be covered by this program; various studies conducted by the Computer Security Institute Computer Crime and Security Survey, Ponemon Group, Graziado Business Review, National Cyber Security Alliance and Symantec; and expert elicitation.

Our CyberSecure Coverage comprises two coverage components: First Party Computer Attack Coverage and Third Party Cyber Liability Coverage. These two coverage components are independent and can be offered separately or together.

Computer Attack Coverage
This first party coverage is triggered by the insured's discovery that a computer attack has affected a computer system owned or leased by the insured and under the insured's control.

A computer attack may be:
- A hacking event or other instance of an unauthorized person gaining access to the computer system
- An attack against the system by a virus or other malware
- A denial of service attack against the insured's system

Discovery of the attack must occur during the policy period. Coverage does not apply to breaches that occur prior to the first inception of the coverage.

Computer Attack Coverage can be offered on a Full or Limited basis:
Full Coverage
- Data Restoration Costs - Coverage for the cost of a professional firm hired by the insured to replace lost or corrupted data from electronic sources.
- Data Re-creation Costs - Coverage for the cost of a professional firm hired by the insured to research, recreate and replace lost or corrupted data from *non*-electronic sources. Sublimit varies based on Computer Attack limit selected.
- System Restoration Costs - Coverage for the cost of a professional firm hired by the insured to restore its computer system to its pre-attack level of functionality by replacing or reinstalling software, removing malicious code and correcting the configuration of the insured's computer system.
- Loss of Business - Coverage for business income lost by the insured and extra expenses incurred by the insured during the period of time when system and data recovery activities are taking place. Sublimit varies based on Computer Attack limit selected.
- Public Relations Services - Coverage for assistance from a professional public relations firm in communicating with outside parties concerning the Computer Attack and the insured's response. Subject to a sublimit of $5,000.

Limited Coverage
- Data Restoration Costs
- System Restoration Costs

Cyber Extortion Coverage is included in the Computer Attack premium. Coverage is provided for the cost of a professional firm hired by the insured to investigate and negotiate a cyber extortion threat – a credible threat or series of threats to launch a potential denial of service attack against an insured. The limits for Cyber Extortion are as reflected in our Gross Premiums table below.

Rate Development
Frequency was derived from data gathered from the 2011 Computer Security Institute Computer Crime and Security Survey and from the HSB/Ponemon survey. Severities were calculated for three of the sub-coverages (data restoration, data recreation and systems restoration) using data drawn from the HSB/Ponemon survey and from the 2003 Graziado Business Review which were then combined with dollar amounts that represented the costs of repairing various kinds of covered damages. These costs were obtained from a variety of IT repair resources, including surveys and published rates.

We also drew upon data from a Carnegie Mellon University research thesis; a 2014 Fox IT CryptoLocker Ransomware Intelligence Report; a 2014 Dell SecureWorks Ransomware Threat Analysis; and several media reports about various instances of cyber extortion.

The following factors were used to develop the Computer Attack loss cost:

Limit	$ 50,000	$ 100,000	$ 250,000	$ 500,000	$ 1,000,000
Freq	0.25%	0.25%	0.25%	0.25%	0.25%
Severity	$ 12,600	$ 36,400	$ 118,100	$ 156,300	$ 185,300
Loss Cost	$ 31.50	$ 91.00	$ 295.25	$ 390.75	$ 463.25

The following was used to develop the Cyber Extortion loss cost for the buy up option:

Limit	$25,000
Frequency	.25%
Severity	$17,400
Loss Cost	$43.50

Cyber Liability Coverage
This third party coverage is triggered by the insured's receipt of notice of a Cyber liability suit. The Cyber liability suit can be a civil action, an alternate dispute resolution proceeding or a written demand for money.

Cyber Liability Coverage can be offered on a Full or Limited basis and provides coverage for:

Full Coverage
- The breach of third party business information
- The unintended propagation or forwarding of malware
- The unintended abetting of a denial of service attack

Limited Coverage
- The unintended propagation or forwarding of malware
- The unintended abetting of a denial of service attack

There need not be a covered loss under the First Party Computer Attack Coverage in order for there to be a loss under the Third Party Cyber Liability Coverage.

The Cyber Liability limit is separate from that afforded under the Computer Attack Coverage. Limits cannot be combined or stacked. Only the limit in force during the policy period when notice of the suit was first received by the insured will apply. The coverage is defense within the limits.

Electronic Media Liability Coverage is included with the Cyber Liability premium. Coverage is provided for defense and settlement costs in the event that a third party claimant sues the insured alleging that the insured's electronic communications resulted in defamation, violation of a person's right of privacy, interference with a person's right of publicity or infringement of copyright or trademark.

Receipt of notice of the suit must occur during the policy period, and the suit must arise from an event that occurs after the first inception of the coverage.

Rate Development
Frequency for each of the kinds of disputes that are covered was based on how often these disputes arose in the public realm and were adjudicated. HSB began with an initial frequency for each of the coverages. For example, a dispute about the transmission of malware always begins with the insured itself suffering a malware attack; a dispute about the insured's participation in a denial of service attack also always begins with the insured itself suffering a malware attack; and a dispute about a breach of third party business information always begins with such a breach. A frequency for each of these initial events was obtained from the Ponemon and Computer Security Institute surveys and from a 2012 survey conducted by the National Cyber Security Alliance and Symantec.

HSB interviewed several lawyers that focus their practices in the cyber area and asked them to quantify, for each kind of dispute, how much it costs to take it to summary judgment, what percentage of disputes go beyond summary judgment, how much it costs to take the dispute to trial, etc. This expert elicitation process produced the severity estimates.

The following factors were used to develop the Cyber Liability loss cost:

Limit	$ 50,000	$ 100,000	$ 250,000	$ 500,000	$ 1,000,000
Freq	0.171%	0.171%	0.171%	0.171%	0.171%
Severity	$ 21,300	$ 78,200	$ 105,800	$ 116,400	$ 128,000
Loss Cost	$ 36.42	$ 133.72	$ 180.92	$ 199.04	$ 218.88

Gross Premiums

We applied an expense and profit load of 30% to arrive at the following options for Computer Attack Coverage and Cyber Liability Coverage:

Computer Attack Limit/ Cyber Liability Limit	Computer Attack Deductible	Cyber Liability Deductible	3rd Party Liability	Data Re-creation Limit	Loss of Business Limit	Public Relations Services Limit	Cyber Extortion	Electronic Media Liability	Premium
$50,000/$50,000	$1,000	$1,000	n/a	n/a	n/a	n/a	$10,000*	Included	$97
$100,000/$100,000	$1,000	$1,000	Included	$5,000	$10,000	$5,000	$10,000*	Included	$321
$250,000/$250,000	$10,000	$10,000	Included	$12,500	$25,000	$5,000	$25,000	Included	$680
$500,000/$500,000	$10,000	$10,000	Included	$25,000	$50,000	$5,000	$25,000	Included	$842
$1,000,000/$1,000,000	$10,000	$10,000	Included	$50,000	$100,000	$5,000	$25,000	Included	$975

*Cyber Extortion coverage can be increased to $25,000 for a charge of $62.00